Peritraumatic Responses and Their Relationship to Perceptions of Threat in Female Crime Victims

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Article

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Peritraumatic responses, aside from dissociation, have been understudied in acute trauma populations. Participants were 172 female rape, 68 assault, and 80 robbery victims recruited through formal reporting agencies and assessed 1 month after the crime. Despite substantial overlap across crimes, rape victims reported more emotional responses reflecting fear, detachment, shame, and more nonactive behavioral responses. Regression analysis examining the prediction of perceived threat by peritraumatic responses and crime variables indicated that increased duration of crimes; decreased calmness; increased fear; numbing; use of begging, pleading, and crying; and attempts to reason with the perpetrator(s) were all significantly associated with increased appraisal of threat.

Keywords: *crime victims; peritraumatic responses; resistance; sexual assault; victim reactions*

In recent years, there has been growing interest among trauma researchers in victims' immediate reactions during a trauma, generally termed *peritraumatic responses*. The findings of several studies suggest that peritraumatic responses may influence victims'

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posttraumatic distress (e.g., Bernat, Ronfeldt, Calhoun, & Arias, 1998; Marmar et al., 1994; Marshall & Schell, 2002; Ozer, Best, Lipsey, & Weiss, 2003) and, in some cases, may contribute to victim-blaming (Kowalski, 1992; Shotland & Goodstein, 1992). However, few studies have examined the range of peritraumatic responses that victims experience, and even fewer have examined the peritraumatic responses of female crime victims (Ozer et al., 2003). A more complete understanding of women's peritraumatic responses is important for several reasons. First, there is evidence that women are more prone than men to develop posttraumatic stress symptoms after a traumatic experience (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995; Norris, 1992). In fact, the findings of several investigations of female rape victims indicate that emotional, dissociative (e.g., numbing), and behavioral peritraumatic responses are associated with subsequent posttraumatic stress symptoms (Bart & O'Brien, 1985; Gershuny, Cloitre, & Otto, 2003; Girelli, Resick, Marhoefer-Dvorak, & Hutter, 1986; Marx & Sloan, 2005; Resick, Churchill, & Falsetti, 1990; Resick & Gerrol, 1988; Resnick, 1997). Victims' peritraumatic perception of threat has been found to be an especially strong predictor of later distress (Bernat et al., 1998; Girelli et al., 1986) and of posttraumatic stress disorder (PTSD; Dunmore, Clark, & Ehlers, 1999; Ozer et al., 2003). Gaining a better understanding of women's peritraumatic responses could yield valuable information about the development of posttraumatic distress, leading, in turn, to better prevention and treatment efforts.

In addition, peritraumatic responses of female victims may be viewed differently depending on the type of crime they experience. Compared to victims of most other crimes, rape victims are

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more likely to be blamed by others if their within-trauma behavior is not in keeping with cultural stereotypes about how real rape victims respond (Burt, 1991; Estrich, 1987; Rozee & Koss, 2001). That is, women who do not physically resist their attackers are more likely to be blamed for rape than are women who do physically resist (Branscombe & Weir, 1992; Estrich, 1987; Kowalski, 1992; Langley, Yost, O'Neal, & Taylor, 1991; Shotland & Goodstein, 1992; Wyer, Bodenhausen, & Gorman, 1985). Rape victims' responses may be scrutinized and viewed as a means by which to determine the legitimacy of the rape (Whatley, 1996). For some, this scrutiny may be self-imposed; rape victims often feel that they are somehow to blame for what has happened to them (Calhoun & Townsley, 1991; Koss & Burkhart, 1989; Koss, Figueredo, & Prince, 2002; Resick & Schnicke, 1993). In addition, without normative data on victim responses, therapists may be less effective at challenging clients' self-blame. Indeed, therapists themselves may hold stereotyped views about victim responses (Dye & Roth, 1990; White & Kurpius, 1999). Thus, an understanding of rape victims' peritraumatic responses is relevant to both treatment concerns and postcrime social support.

Although few studies have focused specifically on characterizing various peritraumatic responses, data from two different lines of research suggest that women have a broad range of responses during a crime. These lines of research include the literature on rape resistance and the literature on the influence of peritraumatic responses on later distress. Within the rape resistance literature, a few studies have reported the percentage of women who display various types of resistance (for a review, see Rozee & Koss, 2001), but resistance behaviors tend to be categorized using broad terms (e.g., verbal or physical resistance). Thus, little is known about the percentage of women who display specific behavioral responses. Much of what is known about other peritraumatic responses (e.g., emotional, cognitive, dissociative) has emerged from research on peritraumatic responses as predictors of subsequent distress.

Among several peritraumatic responses that have been investigated, perceived threat has emerged as a particularly robust predictor of later distress (Ozer et al., 2003). There is evidence that victims' peritraumatic perception of threat of serious harm or

death is an equally, if not more, powerful predictor of subsequent distress than are severity indices such as injury and the assailant's use of a weapon (e.g., Bernat et al., 1998; Girelli et al., 1986). Injury and perceived threat have both been found to predict distress and PTSD (Acierno, Resnick, Kilpatrick, Saunders, & Best, 1999; Culbertson & Dehle, 2001; Davis, Taylor, & Lurigio, 1996; Epstein, Saunders, & Kilpatrick, 1997; Kilpatrick et al., 1989; Ullman & Filipas, 2001). In the study by Kilpatrick et al. (1989), perceived threat and actual injury were related, but the two variables independently predicted crime-related PTSD development in a hierarchical regression model. Girelli et al. (1986) found that peritraumatic distress and perceived threat were better predictors of subsequent posttraumatic stress symptoms than were assault variables, such as perpetrator threats, weapons, and injuries. Moreover, in a recent meta-analysis, perceived threat emerged as one of the strongest predictors of PTSD, with an average effect size of .26, and perceived threat was most strongly associated with PTSD when the trauma experience was noncombat interpersonal violence (Ozer et al., 2003). Although peritraumatic perception of threat appears to be an important influence on subsequent distress, it is not yet clearly understood what factors influence women's perception of threat.

The findings of several studies suggest that perception of threat is related to other peritraumatic responses as well as certain crime variables. Griffin, Resick, and Mechanic (1997) found that rape survivors who reported high levels of peritraumatic dissociation were more likely than were low dissociators to report having high levels of perceived threat during a rape. In a large sample of college students, Bernat and colleagues (1998) examined gender, frequency of lifetime trauma exposure, peritraumatic emotions, peritraumatic dissociation, peritraumatic panic symptoms, and trauma severity (e.g., injury, witnessing harm to another, and perceived threat of death) as predictors of PTSD. PTSD was most strongly predicted by the victim's number of lifetime traumatic experiences and perceived threat of death. The other indices of severity—specifically, injury and witnessing harm to another—did not predict PTSD. Moreover, peritraumatic emotional responses and dissociation made significant contributions in the prediction of PTSD above and beyond the contribution of

vulnerability factors (e.g., being female, number of past traumas) and the severity of traumatic event. All of the peritraumatic responses investigated were interrelated. In addition, there is evidence that women's peritraumatic perceptions of threat mediate the relationship between peritraumatic dissociation and PTSD. Specifically, Gershuny et al. (2003) found that the effect of peritraumatic dissociation on PTSD severity appeared to be indirect and explained by peritraumatic fears of death and lack of control. These findings suggest that perceived threat occurs in conjunction with other peritraumatic responses.

Victims' perception of threat may also be influenced by the nature of the crime itself. Using data from one of the samples used in the present study, Resick and Gerrol (1988) found that compared to female robbery victims, rape victims reported a greater perception of threat and more passive behavioral responses. The authors hypothesized that some of the differences in responses between rape and robbery victims may have been because of differences in the perception of threat elicited by rape relative to that elicited by robbery.

To summarize, whereas individual studies have each focused on a limited number of peritraumatic responses (e.g., rape resistance alone, dissociation alone), the sum of findings from these studies suggests that women experience a variety of peritraumatic responses. A number of these responses predict subsequent distress, and perception of threat has consistently been found to play a significant role. Perception of threat appears to be related to other peritraumatic responses as well as characteristics of the crime itself. However, the nature of these relationships is not clear.

The purpose of the current study was to investigate the range of women's peritraumatic responses to different crimes and the percentage of women who display particular responses. In an attempt to identify variables that may influence perceived threat, this study also investigated the relationship of peritraumatic responses and crime variables to women's perception of threat of serious harm or death across three types of crimes: rape, robbery, and assault.

METHOD

PARTICIPANTS

Participants were included who had experienced a rape, robbery, or physical assault within 2 weeks of calling for an appointment. Rape was defined as any crime involving vaginal, oral, or anal penetration. First-degree physical assault and robbery were defined according to Missouri legal code. First-degree physical assault was therefore defined as a physical assault in which the participant experienced an injury or felt that the perpetrator was trying to kill or injure them. Robbery was defined as a crime in which the perpetrator forcibly stole the participant's property. The only exclusion criteria for this study were illiteracy, apparent psychosis, or intoxication at the time of the assessment (for informed consent and validity purposes). Illiteracy was determined based on the participants' ability to read and explain the consent form. Intoxication and psychosis were assessed based on interviewer clinical judgment.

This study consists of two samples from two community studies. Sample 1 consists of 51 female rape and 80 female robbery victims who were assessed within 1 month after the crime. Sample 2 consists of 68 female victims of first-degree physical assault and 121 female victims of rape assessed within 1 month after the crime.

PROCEDURE

Participants were recruited through police departments, hospitals, and victim assistance agencies. They were informed of the project and were asked to call or return a postcard if they were interested in participating. Cards describing the study were given to crime victims by police officers responding at the scene or by victim service volunteers at the hospital emergency room or victim service agencies. In addition, the St. Louis City Police Department mailed postcards describing the study to victims who had filed a police report. Both mailed and hand-delivered cards described the research, provided the researchers' phone number, and included a return postcard the victims could mail to learn more about the study or schedule an appointment to participate.

For both samples, potential participants who returned postcards were contacted by phone or mail within 2 weeks after the crime. If interested in participating, they were scheduled for interviews within 4 weeks after the crime. With regard to sampling, one variable, age, was controlled within the first sample. Pilot data indicated that robbery victims were somewhat older than rape victims; therefore, robbery victims over 35 were contacted to participate only when a rape victim over 35 participated in the project. For both samples, individuals who could not be scheduled within 4 weeks after the crime were not invited to participate or were dropped from the study.

INSTRUMENTS

Participants were given an extensive battery of psychological inventories. The measure relevant to these analyses is the Trauma Interview (Resick, 1986; Resick, Jordan, Girelli, Hutter, & Marhoefer-Dvorak, 1988).

TRAUMA INTERVIEW

This structured interview yielded descriptive information on the current trauma, including circumstances of the crime, assailant information, restraint or violence during the crime, victim responses during the crime, and actual injuries sustained during the crime. Two questions assessed the victim's perceptions of risk of death or injury: "During the incident, did you think about being killed or seriously injured?" (responses ranged from 0 = *not at all* to 4 = *thought about it all the time*) and "During the incident, how certain were you that you were going to be killed?" (responses ranged from 0 = *completely certain that I would not be killed* to 4 = *completely certain that I would be killed*). The scores on these two items were summed to generate a perceived threat score for each participant such that the range of possible scores was 0 to 8. Twenty-one questions assessed victim responses during the crime and included emotional and behavioral responses. Items were coded using a Likert-type scale ranging from 0 to 4 (i.e., 0 = *none of the time*, 4 = *all of the time*). One item pertaining to whether the victim had used a weapon during the assault was

endorsed by less than 10% of the sample and was thus dropped from any further analysis. The total scale assessing within-trauma responses had a Cronbach's alpha of .74.

RESULTS

PARTICIPANTS

Demographic information for both samples is presented in Table 1. For Sample 1, there were no significant age, race, or educational differences between the rape and robbery groups. However, there were more single rape than robbery victims, $\chi^2(1, n = 131) = 17.75$, $p < .001$. Furthermore, there were no significant differences between rape and robbery victims in the relationship of the assailant to the victim or the use of a weapon. As can be seen in Table 1, most of the perpetrators were strangers to the victims. The majority of the crimes involved the use or display of a weapon and involved only one perpetrator. More robberies than rapes involved more than one perpetrator, $t(128) = -3.77$, $p < .001$, and there was more use of physical restraint during the crime for rape victims, $\chi^2(1, n = 130) = 35.69$, $p < .001$.

For Sample 2, there were no group differences on race or education. However, more rape than assault victims were ages 17 to 30, $\chi^2(2, n = 189) = 8.40$, $p < .05$, and there were more single rape victims, $\chi^2(1, n = 185) = 8.65$, $p < .01$. There were no significant differences between the rape and assault groups in the relationship of the assailant to the victim or the number of perpetrators. Slightly more than half of the perpetrators were known to the victims, and the majority of the crimes involved only one perpetrator. More of the physical assaults involved the use or display of a weapon, $\chi^2(1, n = 188) = 16.59$, $p < .001$, and involved more injuries than in the rape group, $t(169) = 3.69$, $p < .001$. There was significantly more use of physical restraint within the rape group, $\chi^2(1, n = 185) = 48.48$, $p < .001$.

Rape victims in Sample 1 and Sample 2 were compared on demographic and assault characteristics. There were no significant differences between the two samples on age, marital status, race, education, or in the use of restraint during the assault; however, there were significant differences across the samples in some

TABLE 1
Demographics and Crime Characteristics by Sample and Type of Crime

	Sample 1								*Sample 2*							
	Rape				*Robbery*				*Rape*				*Assault*			
Variable	n	%	M	SD	n	%	M	SD	n	%	M	SD	n	%	M	SD
Age																
17-30	38	75			51	64			74	61*			27	40*		
31-45	10	20			25	31			41	34			34	50		
46 and older	3	6			4	5			6	5			7	10		
Marital status																
Married/ cohabitating	1	2			26	33			9	8			15	23		
Currently single	50	98**			54	68**			110	92*			51	77*		
Race																
African American	23	45			33	41			36	30			15	22		
Caucasian	28	55			47	59			85	70			53	78		
Assailant																
Known	13	26			11	14			54	45			37	57		
Stranger	37	74			69	86			67	55			28	43		
Displayed a weapon	33	75			48	61			61	51***			55	81***		
Use of restraint	40	80***			21	26***			96	81***			20	30***		
Years of education			12.8	2.8			12.8	4.1			12.5	2.1			12.4	2.6
Injury			26.3	9.8			22.8	9.7			17.4	1.6**			18.5	2.6**
Number of assailants			1.1	0.4***			1.5	0.7***			1.4	0.9			1.5	0.9

*$p < .05$. **$p < .01$. ***$p < .001$.

crime characteristics. Specifically, Sample 1 had a greater proportion of stranger assaults than Sample 2, $\chi^2(1, n = 171) = 5.15$, $p < .05$; had a greater proportion of assaults where a weapon was present, $\chi^2(1, n = 164) = 7.69$, $p < .01$; and had more severe injuries than in Sample 2, $t(158) = 8.98$, $p < .001$. Individuals in Sample 2 were more likely to have more than one assailant, $t(169) = -2.40$, $p < .05$. Given that there were no significant demographic differences between the two samples and that the differences in crime characteristics were seen as creating a more representative sexual assault sample, the two samples were combined into a single group for further analyses.

RESPONSES BY TYPE OF CRIME

To investigate sexual trauma as a characteristic that distinguishes rape from other types of crime (i.e., assault, robbery), the percentage of women reporting each response was calculated according to the type of crime. Peritraumatic responses were initially compared according to whether victims were rape victims or robbery or assault (R/A) victims. Responses were collapsed across the 5-point Likert-type scales and were counted as having occurred if women reported experiencing them *a little of the time* to *all of the time*. Chi-square analyses were conducted to determine if there were significant differences in the percentage of women reporting each peritraumatic response. The results of these analyses are presented in Table 2. As can be seen in the table, rape victims were significantly more likely than R/A victims to report that they felt betrayed; afraid; detached, as if in a dream; humiliated; and numb during the crime. They were also more likely to report that they begged, pleaded, or cried; tried to reason with the assailant; tried to struggle free; kept quiet and motionless; and did exactly as told. Rape victims were significantly less likely than R/A victims to report that they felt calm. There were no group differences on feeling angry, anxious, and confused; or on kicking, hitting, or punching; screaming or yelling for help; biting or scratching; or passing out. In addition, high percentages of rape and R/A survivors reported that they perceived the threat of serious harm or injury during the crime, but there was no significant difference between the groups.

TABLE 2
Chi-Square Analyses Examining Differences in Peritraumatic Responses Between Rape and Robbery and Assault Groups

	Percent Reporting			
Response	*Rape*	*Robbery/Assault*	df	χ^2
Emotional				
Afraid	97.2	90.6	1,330	6.6**
Angry	86.2	88.0	1,331	0.24
Anxious	89.5	82.0	1,331	3.9
Betrayed	86.2	75.0	1,329	6.6**
Calm	26.0	41.3	1,331	8.8**
Confused	81.9	74.7	1,332	2.5
Detached	73.9	61.3	1,330	5.9*
Guilty	52.9	24.4	1,331	29.9***
Humiliated	91.1	68.7	1,330	26.7***
Numb	75.3	64.0	1,332	5.0*
Behavioral				
Begged, pleaded, cried	87.9	36.3	1,328	94.8***
Bit/scratched	22.7	19.2	1,327	0.59
Cursed/threatened	32.4	30.1	1,325	0.19
Did exactly as told	79.9	45.3	1,316	40.8***
Kicked, hit, punched	37.6	28.6	1,328	2.9
Passed out	9.9	10.5	1,347	0.02
Tried to reason	81.3	39.2	1,325	60.1***
Kept quiet/motionless	74.0	41.5	1,328	35.6***
Screamed/yelled for help	49.7	50.0	1,329	0.002
Tried to struggle free	74.2	45.8	1,326	27.3***
Perceived threat of serious injury or death	89.9	87.7	1,316	0.38

*$p < .05$. **$p < .01$. ***$p < .001$.

PERCEIVED THREAT AND WITHIN-CRIME VARIABLES

One of the aims of this study was to examine the relationship between peritraumatic responses and perceptions of threat within a heterogeneous population of female crime victims. For this purpose, the rape and R/A groups were collapsed for the regression analysis. A hierarchical multiple regression analysis was performed to examine the relationship between perceived threat of harm or injury and the following within-crime characteristics: rape, crime variables, peritraumatic emotional responses, and peritraumatic behavioral responses. The first block consisted of whether the crime was a rape, to examine differences in perceived threat by type of crime (i.e., rape vs. R/A). Five crime variables were

TABLE 3
Hierarchical Regression Predicting Perception of Threat From Peritraumatic Responses (n = 253)

Step and Variable	*B*	*SEB*	β	R^2	ΔR^2
Step 1				.08***	
Sexual assault	0.44	.87	.04		
Step 2				.17***	.09***
Assailant	–1.08	.73	–.10		
Display of weapon	1.11	.71	.10		
Injury	–0.07	.04	–.10		
Duration	0.59	.25	.16*		
Restraint	–1.08	.79	–.10		
Step 3				.29***	.12***
Afraid	0.82	.30	.19**		
Angry	0.09	.23	.03		
Anxious	0.05	.22	.02		
Betrayed	–0.06	.23	–.02		
Calm	–0.53	.26	–.12*		
Confused	–0.18	.22	–.05		
Detached	0.13	.20	.04		
Guilty	–0.13	.23	–.04		
Humiliated	–0.007	.22	–.002		
Numb	0.46	.22	.14*		
Step 4				.34***	.06*
Begged, pleaded, cried	0.57	.27	.18*		
Bit/scratched	–0.07	.36	–.02		
Cursed/threatened	–0.03	.25	–.008		
Did exactly as told	0.12	.25	.04		
Kicked, hit, punched	0.37	.34	.10		
Passed out	0.68	.53	.07		
Tried to reason	0.44	.23	.14*		
Kept quiet/motionless	–0.01	.25	–.004		
Screamed/yelled for help	0.05	.26	.01		
Tried to struggle free	–0.21	.28	–.06		

*p < .05. **p < .01. ***p < .001.

entered in the second block including: acquaintance status, duration of crime, level of injury, restraint during the crime, and display of a weapon. In the third block, peritraumatic emotions were entered, and in the fourth block, peritraumatic behaviors were entered. The rationale for entering peritraumatic emotions before behaviors is based on current theory that fear precedes other responses including behaviors (Foa, Riggs, & Gershuny, 1995). The results of this analysis are presented in Table 3.

In the analysis, sexual assault predicted 8% of the variance in perceived threat, and crime characteristics predicted an

additional 9% of the variance. Peritraumatic emotions contributed an additional 12% of the variance, and peritraumatic behaviors contributed an additional 6% of the variance in perceived threat. The final regression equation predicted 34% of the variance in perceived threat. As shown in Table 3, the variables with significant standardized beta scores in the final equation were duration of assault, fear, calm (in reverse direction), numbing, trying to reason with the perpetrator(s), and begging, pleading, or crying.

DISCUSSION

The results of this study suggest that female crime victims display a range of emotional, cognitive, and behavioral peritraumatic responses. The majority of women in both the rape and R/A groups reported peritraumatic emotional responses that reflect distress and negative arousal (e.g., confusion, anxiety, anger) as well as the perception of imminent harm or death. Approximately one-third of women reported behaviors traditionally viewed as comprising active physical resistance (i.e., biting, cursing, kicking). Despite some commonalties in response patterns, women's peritraumatic responses tended to vary with the type of crime experienced. Compared to R/A victims, a higher percentage of rape victims reported behavioral responses that were relatively nonactive and characterized by strategies that seem to reflect attempts at negotiation (e.g., begged, reasoned). Rape victims displayed a concomitant set of emotional responses that reflect fear, emotional detachment, and shame (e.g., afraid, betrayal, detached, numb, humiliation, guilty). In addition, the results of a regression analysis indicated that perceived threat of imminent harm is related to only one crime variable (i.e., crime duration), three peritraumatic emotions (i.e., feeling afraid, numb, and less calm), and two peritraumatic behaviors (i.e., begging, pleading, or crying, and trying to reason with the perpetrator) across all three types of crimes. Interestingly, none of the other crime variables examined (e.g., injury, weapon) were associated with perceived threat nor was the type of crime, once peritraumatic responses were entered into the equation.

In this sample, high percentages of victims reported peritraumatic distress and concerns that they would be harmed

or killed and low percentages reported having engaged in active physical resistance. All of the crimes investigated in this study are violent by definition, and these findings suggest that women share some fundamental responses to such crimes. However, rape victims and R/A victims differed in terms of how often they reported experiencing several peritraumatic responses. Although emotions reflecting general distress were common to both groups, rape victims were more apt to describe emotions that reflect fear and detachment and that seem to connote a sense of personal responsibility or shame felt by the victim. The differences in peritraumatic responses between rape and non-rape victims suggest that crimes that involve rape may elicit different responses than other crimes

The finding that only one third of rape victims physically fought with the assailant is different from other reports including Koss's (1988) finding that 70% of date rape victims attempted to fight back physically. However, this difference may be accounted for by sampling. Koss's (1988) study was restricted to perpetrations by known assailants and the sample was exclusively college students. In the current study, the majority of assailants were strangers and the sample was more heterogeneous. Rape victims in the current study were also highly likely to use nonactive resistance methods, including begging, crying, pleading, and trying to reason with the assailant. These results also highlight the discrepancy between actual behavior during a rape and findings that resistance during a sexual assault may have a positive effect on the outcome.

That is, previous research has found that many women report that they believe an attempt to fight off a rapist would not work, but rather would make things worse (Furby, Fischhoff, & Morgan, 1989; Gordon & Riger, 1989; Norris, Nurius, & Dimeff, 1996). This is in spite of the fact that the research literature documents a consistent finding that resistance may prevent rape and does not pose an additional risk of injury (see reviews by Rozee & Koss, 2001; Ullman, 1997). This discrepancy highlights a need for better education and rape prevention strategies (Brecklin & Ullman, 2005).

The different response patterns of rape and nonrape victims have implications in terms of how they are judged by others. As previously noted, rape victims who do not physically resist their attackers are more likely to be blamed than are women who do

physically resist (Branscombe & Weir, 1992; Estrich, 1987; Krulewitz & Nash, 1979; Langley et al., 1991; Shotland & Goodstein, 1992; Wyer et al., 1985). Used as a means by which to measure the violence and severity of the crime, victim resistance may be conceptualized as a way in which observers determine whether what occurred was a rape. Such judgments may influence jurors' verdicts and judges' decisions regarding punishment (Langley et al., 1991), as well as police decisions regarding whether a case should be investigated or unfounded.

Clearly, the findings of this study are not congruent with cultural myths about how real rape victims respond. A common rape myth is that "any healthy woman can resist a rapist if she really wants to" (Burt, 1991, p. 31). The corollary is that if she was raped, she must not have resisted enough, and therefore must have wanted it or consented (Burt, 1991). Judging from the high percentages of rape victims who thought that they would be harmed or killed, it is clear that these women were not consenting. Rather, they were afraid and concerned about being seriously harmed or killed. In short, the findings of this study indicate that little or no active resistance on the part of a rape victim should not be interpreted as consent.

Previous findings indicate that perceived threat is related to other peritraumatic responses (Gershuny et al., 2003; Griffin et al., 1997) and crime variables (Kilpatrick et al., 1989). The findings of this study provide additional insight into variables that are related to perceived threat. Perceived threat was predicted by three peritraumatic emotions: feeling afraid, numb, and less calm. These results support previous findings that perceived threat is related to peritraumatic emotions (Bernat et al., 1998; Griffin et al., 1997). As noted, Gershuny and colleagues (2003) found that perceived threat mediated the relationship between dissociation and PTSD. The authors hypothesized that trauma-related fears of death might be conceptualized as an element of panic, which leads to dissociation in the absence of an opportunity for physical escape. The findings in the current study are consistent with Gershuny et al.'s findings. Although there was no measure of temporal sequence in this study, it may be that the perception of threat functioned as a cue for feeling afraid and numb.

Regarding the relationship between duration and victim perception of imminent harm, it may be that the longer the crime, the

more time a victim has to consider the possibility that she will be seriously injured or killed. Although the number of assailant threats and violent acts was not measured in this study, it may be that longer crimes were characterized by more threats or physical violence on the part of the assailant. It is interesting to note that none of the other crime variables included in the regression (e.g., injury, weapon, restraint) were associated with victims' perception of imminent harm. Several of these severity indices have been examined in past research as predictors of postcrime distress, reflecting the assumption that the level of violence (e.g., penetration, injury) in a crime can adequately capture the victim's emotional or cognitive reaction to it. The findings of this study suggest that traditional measures of actual violence and other crime variables (e.g., acquaintance status) may not be related to the victim's perception of imminent harm. It is worth noting that when only crime variables had been entered into the regression was rape a significant predictor of perceived threat. Once peritraumatic emotions were entered, rape was no longer significant. Thus, it appears that peritraumatic emotions were better than sexual assault in explaining the variance in perceived threat.

Two of the peritraumatic behavioral responses predicted perceived threat: begged, pleaded, and cried; and tried to reason with him. Some researchers (e.g., Bart & O'Brien, 1985) have theorized that women's perceptions that they will be killed versus raped may elicit different behavioral responses during a rape. Specifically, women who are concerned about being killed or seriously injured are hypothesized to be more likely to respond passively (e.g., remain quiet and motionless, do as told). Women whose primary concern is not about being killed are hypothesized to be more likely to respond in a more active fashion (e.g., kicking, screaming). These findings suggest that women may be more likely to attempt to negotiate, rather than to either respond passively or to physically resist, when women perceive increased threat of harm or death.

The findings of this study represent an important step toward understanding the pattern of peritraumatic responses experienced by female victims of both sexual and nonsexual violent crimes. This study and future efforts to identify normative peritraumatic responses should inform the work of legal, medical, and mental health professionals who work with female crime

victims. For example, normative data on rape victim responses might be used to revise stereotyped notions that victim resistance is a means by which to determine the legitimacy of a rape. In addition, such data also may help therapists educate clients and challenge their self-blame more effectively.

This study is characterized by certain conditions that may limit the generalizability of the conclusions. Specifically, the sample consisted of crime victims who reported their experiences to police or other authorities. Thus, this sample overrepresented severe crimes, those that involved assaults by strangers, and the presence of a weapon. Given the severity of the crimes, it is not surprising that nearly 90% of the total sample endorsed worrying to some extent that they might be killed or injured during the event. In addition, the rape sample included only completed rapes, which prevents us from examining situations in which women may have avoided an assault or the near misses (Testa, VanZile-Tamsen, Livingston, & Koss, 2004). All of these factors relating to increased severity of the crimes may have decreased the degree to which women engaged in active resistance strategies.

Furthermore, this study did not take into consideration previous trauma history that may have influenced peritraumatic responses to the current crime. Prior trauma history has been associated with increased risk of future victimization (Arata, 2000; Nishith, Mechanic, & Resick, 2000). However, the aim of this study was to examine how peritraumatic responses are related to perceived threat in a recent crime. Future research should attend to the relationship between prior trauma history and peritraumatic responses to examine whether this may help to explain whether prior trauma history peritraumatic responses are a mediator between prior trauma history and the associated increased risk of future victimization.

Despite these limitations, this study represents an important departure from previous research in this area in that it examines a broad range of specific peritraumatic responses. This study also used responses collected within 1 month of the crime, thereby reducing the risk of errors associated with retrospective reporting. Few other studies have looked at these variables within such a short period of time after the crime. Future research on peritraumatic responses should include victims of completed and noncompleted crimes as well as victims who either did not report

their crimes or who do not acknowledge that they were victimized (e.g., the unacknowledged rape victims described by Koss, 1985). Research on the temporal relationship of perception of imminent harm and other peritraumatic responses would also add to our current understanding of how and why female crime victims respond as they do. Moreover, the relationship between peritraumatic responses and the development of subsequent PTSD warrants examination. Although a number of studies have documented a relationship between peritraumatic dissociation and PTSD (e.g., Bernat et al., 1998; Gershuny et al., 2003; Marmar et al., 1994), less is known about how other peritraumatic responses affect the development of PTSD (Dalgleish & Power, 2004). Finally, in light of the greater scrutiny experienced by rape victims, research focusing on patterns among rape victims' peritraumatic responses would be of particular value in efforts to educate women, helping-professionals, and the legal community about how real rape victims respond.

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